

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L3	182	arsenic and fining adj agent	US-PGPUB; USPAT	OR	ON	2007/09/27 08:46
S1	67	("BaTi.sub.4O.sub.9" or BaTi4O9)	US-PGPUB; USPAT	OR	ON	2007/09/05 09:35
S2	416	(SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and ((potassium or lithium) adj free or (no or lacking) adj (potassium or lithium))	US-PGPUB; USPAT	OR	ON	2007/09/24 15:30
S3	69	(SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and ((potassium or lithium) adj free or (no or lacking) adj (potassium or lithium)) and ion adj exchange	US-PGPUB; USPAT	OR	ON	2007/09/24 15:43
S4	35780	(SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and ion adj exchange	US-PGPUB; USPAT	OR	ON	2007/09/24 15:44

## EAST Search History

S5	8443	(SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and ion adj exchange and silver	US-PGPUB; USPAT	OR	ON	2007/09/24 15:44
S6	570	(SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and ion adj exchange and "501".clas.	US-PGPUB; USPAT	OR	ON	2007/09/24 15:45
S7	641	(SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and ion adj exchange and "501".clas.	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2007/09/24 15:58
S8	3	(SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and ion adj exchange and "501".clas. and single adj alkali	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2007/09/24 16:00

## EAST Search History

S9	17	(SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and ion adj exchange and "501".clas. and (((no or lacking) adj (potassium or lithium)) or (potassium or lithium) adj free)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2007/09/24 16:14
S10	10	(SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and ion adj exchange and "501".clas. and (((no or lacking) adj (potassium or lithium)) or (potassium or lithium) adj free) and (As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or Arsenic)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2007/09/24 16:18
S11	205	(SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and ion adj exchange and "501".clas. and (As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or Arsenic)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2007/09/24 16:37

## EAST Search History

S12	0	(SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and ion adj exchange and "501".clas. and (As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or Arsenic) SAME ".1"	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2007/09/24 16:39
S13	12	("3649311"   "4160654"   "4562161"   "4792535"   "4894303"   "4902426"   "5004707"   "5007948"   "5114453"   "5114813"   "5145757"   "5790729").PN. OR ("6818577").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/09/25 13:43
S14	16	("4191547"   "4297417"   "4337295"   "4567104"   "4670366"   "4726981"   "4798768"   "4894303"   "4897509"   "4979975").PN. OR ("5114813").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/09/25 13:51
S15	14	(As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or Arsenic) and (S13 or S14)	US-PGPUB; USPAT	OR	ON	2007/09/25 16:07
S16	10849	(As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or Arsenic) and (SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide)	US-PGPUB; USPAT	OR	ON	2007/09/25 14:06

## EAST Search History

S17	1953	(As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or Arsenic) and (SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide) and ("501" or "428"). clas.	US-PGPUB; USPAT	OR	ON	2007/09/25 14:07
S18	1953	(As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or Arsenic) and (SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide) and ("501" or "428"). clas.	US-PGPUB; USPAT	OR	ON	2007/09/25 14:14

## EAST Search History

S19	204	(As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or Arsenic) and (SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide) and ("501" or "428"). clas. not (K2O or "K.sub.2 O" or "K.sub.2O" or K2O or "K.sub.2 O" or "K.sub.2O" or potash or potassium adj carbonate or potassium or Li2O or "Li.sub.2 O" or "Li.sub.2O" or Li2O or "Li.sub.2 O" or "Li.sub.2O" or Lithia or lithium)	US-PGPUB; USPAT	OR	ON	2007/09/25 15:08
S20	21	(As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or Arsenic) and (SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide) and ("501" or "428"). clas. and ("632.8" or "587.6") adj nm	US-PGPUB; USPAT	OR	ON	2007/09/25 16:08
S21	35	"6128430"	US-PGPUB; USPAT	OR	ON	2007/09/25 15:11
S22	36	"5837629"	US-PGPUB; USPAT	OR	ON	2007/09/25 15:12
S23	10	"5830814"	US-PGPUB; USPAT	OR	ON	2007/09/25 15:12

## EAST Search History

S24	16	("4191547"   "4297417"   "4337295"   "4567104"   "4670366"   "4726981"   "4798768"   "4894303"   "4897509"   "4979975").PN. OR ("5114813").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/09/25 15:48
S25	66	anma.in.	US-PGPUB; USPAT; USOCR	OR	ON	2007/09/25 15:48
S26	0	yasuhiro adj anma.in.	US-PGPUB; USPAT; USOCR	OR	ON	2007/09/25 15:49
S27	142	anma.in. fdk.as.	US-PGPUB; USPAT; USOCR	OR	ON	2007/09/25 15:49
S28	1	anma.in. and fdk.as.	US-PGPUB; USPAT; USOCR	OR	ON	2007/09/25 15:49
S29	1953	(As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or Arsenic) and (SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide) and ("501" or "428"). clas.	US-PGPUB; USPAT	OR	ON	2007/09/25 16:12

## EAST Search History

S30	207435	(As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or As2O3 or "As.sub.2 O.sub.3" or "As.sub.2O.sub.3" or Arsenic) and (SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide) adj2 (\$13 "2.1" "2.2" "2.3" "2.4" "2.5" "2.6" "2.7" "2.8" "2.9" "3.0" "3.1" "3.2" "3.3" "3.4" "3.5" "3.6" "3.7" "3.8" "3.9" "4.0" "4.1" "4.2" "4.3" "4.4" "4.5" "4.6" "4.7" "4.8" "4.9" "5.0" "5.1" "5.2" "5.3" "5.4" "5.5" "5.6" "5.7" "5.8" "5.9" "6.0" "6.1" "6.2" "6.3" "6.4" "6.5")\$1 and ("501" or "428").clas.	US-PGPUB; USPAT	OR	ON	2007/09/25 16:15
S31	6016	(SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and ion adj exchange and silver and (glass or ceramic or frit or glaze)	US-PGPUB; USPAT	OR	ON	2007/09/26 14:47
S32	29010	"501".clas. (SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and ion adj exchange and silver and (glass or ceramic or frit or glaze)	US-PGPUB; USPAT	OR	ON	2007/09/26 14:48



## EAST Search History

S33	155	"501".clas. and (SiO2 or "SiO.sub.2" or SiO2 or "SiO.sub.2" or silica or silicon or quartz silicon adj dioxide) and (Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or Al2O3 or "Al.sub.2 O.sub.3" or "Al.sub.2O.sub.3" or alumina or aluminum or aluminium or aluminium adj oxide or aluminum adj oxide) and (Na2O or "Na.sub.2 O" or "Na.sub.2O" or Na2O or "Na.sub.2 O" or "Na.sub.2O" or sodo or soda or sodium) and ion adj exchange and silver and (glass or ceramic or frit or glaze)	US-PGPUB; USPAT	OR	ON	2007/09/26 14:48
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